CLAIM:

1. A small synthetic HCV IRES ribonucleic acid of sequence GGGA GGGC CCTCTCG GTAGA ACACCA TGACGGA CTATCCCACGAACGCTCACGGGGCCCTCC.

2. A structural analog or mimic of small synthetic HCV IRES ribonucleic acid of sequence GGGA GGGC CCTCTCG GTAGA ACACCA TGACGGA CTATCCCACGAACGCTCACGGGGCCCTCC.

3. Use of small synthetic HCV IRES ribonucleic acid of sequence GGGA GGGC CCTCTCG GTAGA ACACCA TGACGGA CTATCCCACGAACGCTCACGGGGCCCTCC or the structural analog or mimic thereof as inhibitor of HCV IRES-mediated translation mechanism by the SL III e+F RNA of the HCV 5'UTR.

4. Use of small synthetic HCV IRES ribonucleic acid of sequence GGGA GGGC CCTCTCG GTAGA ACACCA TGACGGA CTATCCCACGAACGCTCACGGGGCCCTCC or the structural analog or mimic thereof as an antiviral agent to combat HCV infection.

5. A polynucleotide comprising the HCV IRES nucleic acid sequence GGGA GGGC CCTCTCG GTAGA ACACCA TGACGGA CTATCCCACGAACGCTCACGGGGCCCTCC or the structural analog or mimic thereof.

6. A recombinant vector comprising the polynucleotide of claim 5.

7. A method of synthesizing the HCV IRES nucleic acid sequence GGGA GGGC CCTCTCG GTAGA ACACCA TGACGGA CTATCCCACGAACGCTCACGGGGCCCTCC or the structural analog or mimic thereof by in vitro transcription assay using known methods.

8. A method as claimed in claim 7, wherein synthetic DNA oligonucleotide corresponding to domain III stem-loops e+f structures with T7 promotor sequences at the 5'end was annealed to T7 RNA polymerase promoter primers and transcribed *in vitro* using T7 RNA polymerase, extracting the transcription reaction with phenol and chloroform, purifying and concentrating the RNA formed by alcohol precipitation, drying the RNA pellet in vacuum centrifuge and dissolving in nuclease free water.

9. A method for making a recombinant vector comprising the step of inserting the Polynucleotide or the structural analog or mimic of claim 5 into a vector.

10. A method for inhibiting HCV IRES mediated translation comprising the introduction of the secondary structure of the 100-fold and 200-fold molar excess of *in vitro* transcribed SL II, III and IV RNAs to *in vitro* translation reactions of HCV bicistronic RNA.

11. An antiviral composition containing the nucleic acid sequence GGGA GGGC CCTCTCG GTAGA ACACCA TGACGGA CTATCCCACGAACGCTCACGGGGCCCTCC or a structural analog or mimic optionally admixed with a pharmaceutically acceptable carrier, diluent, excipient or adjuvant.

12. A method of manufacturing an antiviral composition for treating liver cirrhosis and hepatocellular carcinoma caused by hepatitis C virus comprising admixing the nucleotide sequence or a structural analog or mimic according to claim 1 or 2 with a pharmaceutically acceptable carrier, diluent, excipient or adjuvant.